

# **Aerospace Engineers**

carte077@bama.ua.edu  
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Northport, AL 35473  
(205)347-8366 or (205)339-5045

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Northport, AL 35473

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**Bachelor of Science; Aerospace Engineering**  
The University of Alabama, Tuscaloosa, Alabama  
Expected Graduation Date: May 2008    GPA: 3.85 out of 4.00

May 2003

### Advanced Diploma

## Valedictorian

GPA: 4.03 out of 4.00

### PUTER SKILLS

Proficient in Word Perfect, Microsoft Word, Power Point, AutoCAD, HTML, Windows 95-XP, Internet browsers such as Netscape and Microsoft Internet Explorer  
Familiar with Microsoft Excel

## WORK EXPERIENCE

Worked as ASA Softball Umpire, West Alabama Umpires Association, Tuscaloosa, Alabama, May2000-present

The University of Alabama, Tuscaloosa, Alabama  
Computer Based Honors Program  
University Honors Program,  
American Institute of Aeronautics and Astronautics  
Honors Program Student Association  
HPSA Intramural Flag Football team

Tuscaloosa County High School, Northport, Alabama  
Served as Mu Alpha Theta, President  
National Honor Society  
National Beta Club  
National Latin Honor Society  
Served as Key Club Secretary  
Member of 2002 state championship track team  
Captain of high school cross country team  
Finished 2002 Mercedes Marathon, Birmingham, AL  
Science Olympiad participant  
Leadership Conference at Mercedes Benz

The University of Alabama, Tuscaloosa, Alabama  
 Recognized as Presidential Scholar  
 Awarded Engineering Scholarship and Engineering Leadership Scholarship

Tuscaloosa County High School, Northport, Alabama

**Named Outstanding Senior**

Named Outstanding Senior  
Named Mr. Citizenship of Tuscaloosa County High School

Named Mr. Citizenship of Tuscaloosa County High School  
Recognized for Perfect Attendance throughout high school

## **SURYA PRASANNA K. CHODIMELLA**

E-mail: [chodi001@bama.ua.edu](mailto:chodi001@bama.ua.edu)

308 Grace Street, Apt #347  
Tuscaloosa, Alabama, USA 35401  
Phone: (205) 657 2515 (Cell)

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### **OBJECTIVE**

Seeking a challenging position as a Finite Element Engineer, which requires design/ development, analysis, utilizing my strong analytical and problem solving skills.

### **EDUCATION**

**Master of Science** in Aerospace Engineering Science & Mechanics, May 2003 (Exp.) **GPA - 4.0/4.0**

University of Alabama, Tuscaloosa, AL

**Master of Science** in Industrial Engineering, Dec. 2002 (Exp.) **GPA - 4.0/4.0**

University of Alabama, Tuscaloosa, AL

**Bachelor of Science** in Mechanical Engineering. Aug '98  
Andhra University, India

### **EXPERIENCE SUMMARY**

#### **Research Assistant, University of Alabama**

**May 01-present**

- Conducting High Velocity Impact Simulation of spot-welded structures in automobiles using Finite Element Analysis Packages – **Hypermesh / Patran** as Pre-Processor/ Post-Processor and **Abaqus** as Solver
- Designed the test fixture and assisted in impact testing of spot welded joints
- Conducting finite element analysis of various structures
- Currently teaching a course in Mechanics of Materials Laboratory (AEM 251)

#### **Graduate Assistant, University of Alabama**

**Aug 00-present**

- Conducting Research to identify significant factors for success of Risk Management for Marshall Space Center, NASA, Huntsville
- Supervised a course in Safety Engineering for Graduates & Undergraduates
- Conducting labs on Statistical Software Package, MINITAB

#### **Designer, National Ship Design & Research Center, Visakhapatnam, India** **Nov 98 - Jul 00** ([www.nsdr.com](http://www.nsdr.com))

- Conducted stress analysis on Offshore Platforms, Ships Structures and Reactors using Finite Element Analysis (FEA) Package "Numerically Integrated Elements for System Analysis (NISA)"
- Designed and Analyzed Composite Rudder for Naval Vessel
- Conducted Vibration Analysis for Bearings and Couplings in the Ore Handling Complex of Visakhapatnam Port Trust
- Involved in design of Dredger and Passenger Vessel. Responsibilities included designing of ships' machinery room, conducting vibration analysis of machinery, propeller shaft and rudder
- Participated in Quality Management of Organization by conducting internal audits
- Worked on six-member team to release Maritime Directory for first time in India

### **COMPUTER SKILLS**

Finite Element Analysis Tools: ABAQUS (Static & Dynamic Structural Analysis), PRO/E, PATRAN, HYPERMESH, ANSYS, NISA, and FORAN

Languages: C/C++ and Fortran

Operating Systems: UNIX and Windows 98/NT/2000

Applications: AutoCAD (2000, R-14), Matlab, Arena, MS Office

## SKILLS

- Experience proven ability to manage multiple projects and coordinating specifications tasks.
- Design/ Development, Analysis (both manual and FEA), of Structures and complex Mechanical Equipment. Management of engineering team
- Theoretical background in Structural Mechanics, Finite Element Method, Theory of Elasticity, Plasticity, Composites and Dynamics

## RELEVANT COURSES

Finite Element Analysis  
Theory of Structures  
Experimental Mechanics  
Theory of Elasticity  
Theory of Plasticity

Theory of Composites  
Engineering Statistics  
C, C++,  
Information Processing  
Fortran

## ACADEMIC PROJECTS

- Conducted the Static and Dynamic Analysis of an Underwater Weapon using Finite Element Analysis
- Developed applications to find the Natural Frequency of the Underwater Weapons in C language

## SUMMER INTERN

Naval Science & Technological Labs, Visakhapatnam, India

Summer 1997

- Assisted senior engineers and scientists in data collection
  - Analyzed the acoustic properties of a building
- Hindustan Shipyard Ltd., Visakhapatnam, India

Summer 1995

- Studied the structural details of ships
- Analyzed the bulkheads and load bearing structures for structural strength by Finite Element Analysis

## HONORS

- William Jordan Fellowship, University of Alabama (2002)
- Alpha Pi Mu Industrial Engineering Honor Society
- Graduate Research Assistantship, University of Alabama (2000, 2001, 2002)

## PUBLICATIONS

1. P. K. Chodimella, M. E. Barkey, and S. E. Jones. "High Velocity Impact Simulation of Spot Welded Joints." Abstract and Animated Computer Simulation accepted to SC2001 (Supercomputer Conference), November 10-16, Denver, Colorado, 2001. Demonstration to be made by the Alabama Supercomputer Center.
2. P. K. Chodimella, Paul S. Ray, B. Pattabhiraman, and R. Srinivasan. "Risk Analysis Tools Successful in Contemporary Industries". Presented at the XVI Annual International Occupational Ergonomics and Safety Conference, 2002.

## REFERENCES

Available upon request

## **JENNIFER J. KIMMETT**

P.O. Box 10222  
College Station, TX 77842  
(979) 485-8115  
jenniferkimmett@hotmail.com

### **Education**

Texas A&M University	The University of Alabama
<b>MS: Aerospace Engineering</b>	<b>BS: Aerospace Engineering</b>
Expected Graduation - May 2002	Graduation - May 2000
Cumulative GPA 3.812/4.0	Cumulative GPA 3.9/4.0

Passed the Fundamentals of Engineering Exam (FE), Spring 1999

### **Experience**

August 2001 -  
Present

**National Defense Science and Engineering Graduate Fellowship (NDSEG)**  
American Society for Engineering Education (ASEE)  
Conducting research for my thesis.  
**Thesis topic: Autonomous Aerial Refueling of UAVs**

May 2001 -  
August 2001

**Graduate Assistant Research (GAR)**  
Texas A&M University, College Station, TX  
Developed and implemented lateral beam guidance capture and hold autopilot for the Commander 700 six degree of freedom flight simulator.

August 2000-  
May 2001

**Graduate Assistant Non-teaching (GANT)**  
Texas A&M University, College Station, TX  
Graded bi-weekly design reports for the senior aircraft design class.  
Graded homework and tests for aerospace controls class, and tutored students outside of class.

May 2000 -  
July 2000

**Summer Engineering Internship (Secret Clearance)**  
Sparta Inc., Huntsville, AL  
Developed GUIs using Visual C++ for data analysis, created missile models in MATLAB Simulink, ran various missile simulations and plotted results.

May 1999 -  
August 1999

**Summer Engineering Internship**  
Sparta Inc., Huntsville, AL  
Worked on missile models in MATLAB Simulink, developed GUIs in MATLAB to analyze results from the models, and evaluated the capabilities of MATRIX X System Build.

### **Computer Skills**

C/C++ - Visual C++ 6.0 with experience in MFC, FORTRAN, MS Office, MATLAB, MATRIX X, Mathcad, AutoCAD 2000, Dreamweaver, HTML

### **Honors/ Activities**

Private Pilot License (June 30, 1996)  
National Defense Science and Engineering Graduate Fellowship (NDSEG)  
Zonta International Amelia Earhart Fellowship  
Regents Fellowship from Texas A&M  
AIAA Undergraduate Foundation Scholarship  
American Institute of Aeronautics and Astronautics (AIAA), Officer - President  
Sigma Gamma Tau (National Aerospace Engineering Honor Society), Member  
Tau Beta Pi (National Engineering Honor Society), Officer - Cataloger  
Capstone Engineering Society Outstanding Senior Award  
99's (International Organization of Women Pilots), Member

### **References**

Available upon request

**Daniel R. Lewis**

Lewis031@bama.ua.edu

**Current Address:**

900 Hargrove Road Apt#74  
Tuscaloosa, Alabama 35401  
(205) 758-9590

**Permanent Address:**

2308 Applewood Drive  
Birmingham, Alabama 35215  
(205) 854-0790

**Objective**

To obtain an entry level position in the aerospace industry performing research in aerodynamics and a future in wind tunnel testing.

**Education**

**Bachelor of Science: Aerospace Engineering**  
The University of Alabama, Tuscaloosa, Alabama  
Minor: Computing Technology and Applications  
Expected Graduation: May 2004  
Cumulative GPA 3.3/4.0 AE GPA 3.43/4.0

**Experience**

**Professors Assistant**, January 2003-September 2003  
The University of Alabama, Tuscaloosa, Alabama  
Worked with subsonic and supersonic wind tunnels. Designed lab experiment for Aerodynamics I class. Installed a pressure scanner and an eight channel strain-gage system. Ordered motors for the six-component strain gage balance, balance calibrator, and three dimensional traverse.

**Delivery Driver**, Summer 2001  
Carryout Cab, Birmingham, Alabama  
Delivered restaurant food. Interacted with customers.

**Computers**

C/C++, FORTRAN, LabVIEW, AutoCAD, MS Office, Windows, html, ALGOR, Matlab

**Hobbies**

R/C airplanes, model trains, fishing, music, computers, football

**Accomplishments**

American Institute of Aeronautics and Astronautics  
Academy of Model Aeronautics  
Engineering Day Tour Guide  
Dean's List

**References**

Available upon request

## Kazuhiro Nishita

4395 Heathersage Circle  
Tuscaloosa, AL 35405  
(205) 507-0262  
e-mail: k@nishita.com

### EDUCATION

#### **Ph.D.: Aerospace Engineering and Mechanics**

The University of Alabama, Tuscaloosa Alabama

**Expected Graduation: May 2004**

Cumulative GPA 3.74/4.0

*Specialty: Application of Artificial Immune System for Control Problems*

#### **Master of Science: Engineering Science and Mechanics**

The University of Alabama, Tuscaloosa Alabama

**Graduated: August 1999**

Cumulative GPA 3.67/4.0

*Thesis: Software Simulation of Fuzzy Controller Tuning:*

*Comparing a Genetic Algorithm to a Neural Network Approach*

#### **Bachelor of Science: Aerospace Engineering**

The University of Alabama, Tuscaloosa Alabama

**Graduated: December 1994**

Cumulative GPA 2.98/4.0

### EXPERIENCE

#### **Graduate Research Assistant**

- The University of Alabama, Department of Aerospace Engineering and Mechanics 1995-2003

#### **Web Site Development**

- The University of Alabama, Department of Aerospace Engineering and Mechanics 1995
- The University of Alabama, Department of Aerospace Engineering and Mechanics, Intelligent Control Lab 1995
- CynapSys, LLC, Birmingham, Alabama 1999
- Flexible Intelligence Group, LLC, Tuscaloosa, Alabama 1997
- Crownmaster's Inc. Okayama, Japan 2002-2003

#### **Software Development**

- Nviewlib: Graphic tool for Windows programmer. This work is published in Borland C++ Builder How-To, Chapter 9, Waite Group Press (1997) and C't (Magazin für computer technik), Verlag Heinz Heise GmbH & Co KG, German (1997) and various internet sites.
- EasyZip: Self extracting zip file maker. This work is published in Vector Pack Project, Japan Vector Software Co., Japan (1997-1999) and various internet sites.

- Control to RTF: Visual component lib to convert control to RTF File. This work is published in various internet sites.
- FlexTool (LNN)<sup>TM</sup>: Neural Networks software. Commercially sold from Flexible Intelligence Group, LLC.
- PondMonitor<sup>TM</sup>: Aquaculture water quality monitoring software for Royce Oxygen Analyzer. Commercially sold to AUTOHAND, Inc. from Flexible Intelligence Group, LLC.
- FlexTool (RS)<sup>TM</sup>: Retirement system prediction.
- FlexTool (FS)<sup>TM</sup>: Fuzzy Logic software.

#### **Software Consultant**

- ACTOGA Project: Air Force Fighter flight formation optimization using Genetic Algorithms project under Unix system. This project was funded by the USAir Force , 1996
- Consulting AI software development for Flexible Intelligence Group, LLC, 1995-1998
- Consulting to develop an aquaculture water quality monitoring software using Royce Oxygen Analyzer for AUTOHAND, Inc, Tuscaloosa, Alabama, 1997
- Consulting software development for CynapSys, LLC, 1999-2003.
- Virtual D.E.R.<sup>TM</sup>: Aeronautical structural analysis software which is commercially available from CynapSys, LLC, 1999-2003.

#### **Language Translation**

- Tuscaloosa Steel, Inc 1995  
Consulting and Translation of Japanese Engineering blueprints for steel mill expansion project into English.

#### **COMPUTERS**

Authored and consulted for developing numerous computer codes. Many of these codes have focused on the PC MS Windows software development and Internet applications. Numerous other codes developed for modeling engineering systems as a graduate research assistant at the University of Alabama. Languages include: ASP, HTML, CGI, Coldfusion, C, C++, Delphi (Pascal), Visual Basic, and FORTRAN, Matlab Script.

#### **HONORS**

Graduate Council Research Fellowship at University of Alabama, Summer 2000  
Graduate Council Research Fellowship at University of Alabama, 2000-2001  
Sigma Gamma Tau, The National Aerospace Engineering Honor Society, 1999  
AIME Fellowship, The University of Alabama, 1997-1999  
Dean's List, The University of Alabama, 1994  
Phi Eta Sigma, Freshman Honor Society, 1991  
President's List, The University of Alabama, 1991  
Japan Mathematical Science Foundation Fellowship, 1991-1994



## PUBLICATIONS

### TECHNICAL PAPERS (JOURNAL)

- **Robustness Analysis of Neural Networks with an Application to System Identification**, (Authors: K. KrishnaKumar & K. Nishita), AIAA Journal of Guidance, Control, and Dynamics Volume 22, Number 5, Page 695, September-October, 1999.
- **A comparison of fuzzy and neural network modeling for separation equipment**, (Authors: Karr, C. L., Weck, B., & Nishita, K.), *Fluid Particle Separation Journal* (1997 accepted).
- **Neural network-based tuning of fuzzy systems**. (Karr, C. L., & Nishita, K.) Report for NASA Langley Research Center, 1-43 (1997).

### TECHNICAL PAPERS (CONFERENCE)

- **Intelligent Systems in Aerospace Applications**, (Authors: K. KrishnaKumar, Y. Hachisako and K. Nishita), Japan Society for Aeronautical and Space Sciences(JSASS) 14<sup>th</sup> International Sessions in 38<sup>th</sup> Aircraft Symposium, Oct 11, 2000, Sendai, Japan
- **Genetic-Fuzzy Controller for Truck Trailer Backer-Upper**, (Authors: Vongpaseuth, T. and Nishita, K), Society of Women Engineers 1998 National Conference, June 16-20, 1998, Houston, TX
- **Robustness Analysis of Neural Networks with an Application to a Neuro-controller Problem**, (Authors: K. KrishnaKumar and K. Nishita), AIAA 96-3852, AIAA Guidance and Control Conference, San Diego, (1996).
- **BORN--Bama Optimized Recurrent Neural Networks**, (Authors: K. KrishnaKumar and K. Nishita), WCNN'96, San Diego, (1996).
- **Robustness of Recurrent Neural Networks**, (Authors: K. KrishnaKumar and K. Nishita), WCNN'96, San Diego, CA, (June 1996).
- **A comparison of fuzzy and neural network modeling for mineral processing equipment**, (Authors: Karr, C. L., Weck, B., & Nishita, K.), Proceedings of the Annual Meeting of the Society for Mining, Metallurgy, and Exploration (preprint number 97-65), Denver, CO. (1997).

### EDITED BOOK CHAPTERS

- **IMMUNIZED ARTIFICIAL SYSTEMS - CONCEPTS AND EXAMPLES**, (Authors: K. KrishnaKumar & K. Nishita), GENETIC ALGORITHMS FOR OPTIMISATION IN AERONAUTICS AND TURBOMACHINERY, von Karman Institute for Fluid Dynamics, Belgium, MAY, 2000.
- **SOFTWARE SIMULATION OF FUZZY CONTROLLER TUNING: COMPARING A GENETIC ALGORITHM TO A NEURAL NETWORK APPROACH**, (Author K. Nishita), Master Thesis, The University of Alabama, (1999).
- **Tuning BAMA Optimized Recurrent Neural Networks Using Genetic Algorithms**, (Author K. Nishita), Industrial Applications of Genetic Algorithms, Chapter 11, CRC Press, L.L.C., (1999).

## REFERENCES

Available upon request

# ELIZABETH HEATHER PATTERSON

1122 7<sup>th</sup> Ave. Apt. #1, Tuscaloosa, AL 35401

EHeatherP@aol.com (205)752-2865

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## EDUCATION

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BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING

The University of Alabama

Graduation Date: May 2004

Cumulative GPA: 3.10

Major GPA: 3.21

Society of Women Engineers 1999-Present

Current President

2002-2003 Vice President of Outreach

Secretary Fall Semester 2001

Attended Regional Conference 2001, 2002

Attended National Conference 2002, 2003

Volunteer at 2003 National Conference

The American Institute of Aeronautics and

Astronautics 1999-Present

Current Treasurer

Attended Regional Student Conference 2003

Dean's List - Spring 2000

YEARS ATTENDED: 1999-PRESENT

Tuscaloosa, Alabama

National Society of Collegiate Scholars

Community Service Committee 2001

The Gamma Beta Phi Society

Distinguished Member 2001

Wesley Foundation Active Member

The University of Alabama's Women's Leadership

Institute Mentor Program

William E. Crowder Scholarship 1999, 2001

Aerospace Engineering and Mechanics

Departmental Scholarship - 2000, 2003

UA SWE Most Active Sophomore Award

Alabama Space Grant Consortium Scholarship  
2002

## SKILLS

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Microsoft Office (Word, Excel, PowerPoint), WordPerfect Office, Matlab, Maple, C++, Fortran, AutoCAD, Algor,  
Data Collection and Reduction in Terminal Ballistics Research,

## PUBLICATIONS

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Patterson, E. Heather, Torres, Karen L. AAn Experimental Study of Length and Diameter Effects in OFHC  
Copper Cylinders With the Taylor Impact Test@, Proceedings of AIAA Student Conference, Kill Devil Hills,  
NC, March 27-28, 2003.

Torres, Karen L., Patterson, E. Heather. AHigh Strain Rate Material characterization of High Strength Steels@,  
Proceedings of AIAA Student Conference, Kill Devil Hills, NC, March 27-28, 2003.

## EXPERIENCE

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STUDENT RESEARCH ASSISTANT FOR DR. STANLEY E. JONES, 2000-PRESENT

Impact and Penetration Mechanics Laboratory

Department of Aerospace and Mechanics, The University of Alabama

Responsibilities range from secretarial duties, computer maintenance, data collection, and data reduction.

Principal research topics are Taylor Testing for the purpose of studying material properties, and penetration tests  
for studying both projectile strength and performance. Data analysis techniques include detailed data collection  
from lab scale testing as well as data reduction using theoretical and mathematical models.

COUNSELOR AT U.S. SPACE CAMP, SUMMER 2001, SUMMER 2002, SUMMER 2003

U.S. Space and Rocket Center in Huntsville, AL

Responsibilities were to provide a safe and well disciplined environment for groups of approximately sixteen middle school aged children attending camp. This required dealing with scheduling, discipline problems, interacting with parents, teaching various aspects of aerospace technology and history, and training campers for simulated Space Shuttle missions.

## SARAH PHILYAW

Email address: [phily002@bama.ua.edu](mailto:phily002@bama.ua.edu)

### CAMPUS ADDRESS:

The University of Alabama  
Bryce Lawn Apts. 202/405  
Tuscaloosa, Al. 35401  
205-347-7395

### PERMANENT ADDRESS:

1544 Slaughter Rd.  
Madison Al. 35758  
256-722-0982

### EDUCATION

The University of Alabama in Tuscaloosa  
Degree: Bachelor of Science, May 2003  
Major: Aerospace Engineering and Mechanics  
Major GPA: 3.17/4.00

University of Alabama in Huntsville  
Core Curriculum Coursework  
No degree obtained

### CLASS PROJECTS

- Aircraft Performance, Fall, 2001. Wrote a program in C++ that finds the takeoff range on a runway for a plane with certain characteristics at a specified altitude.
- Structural Design/Testing, Spring 2002. Helped design, fabricate, and test a tapered beam holding up to 10,00lbs.

### RELEVANT COURSEWORK

- |                     |                                |                             |
|---------------------|--------------------------------|-----------------------------|
| -Fluid Mechanics    | -Aircraft Performance          | -Algorithm Development(C++) |
| -Aerodynamics I,II  | -Structural Design and Testing | -Senior Design              |
| -Thermodynamics     | -Aircraft Structures           |                             |
| -Dynamics of Flight | -Propulsion                    |                             |

### COMPUTER SKILLS

C, C++, and Fortran computer languages  
Microsoft 98/95, Microsoft Excel, Microsoft Word, and Microsoft Power Point  
Solid Edge, Matlab, Maple V

### EXPERIENCE

Researcher and Assistant Engineer Summer, 2000  
Aerospace Engineering Department, The University of Alabama  
-Worked with Microsoft Excel by using the database to plug in formulas  
-Conducted reception work  
-Helped perform research and wrote documentation on a software based on Prandtl's Lifting Line Theory.

Tutor Fall 2001-Spring 2002  
Center for Teaching and Learning, The University of Alabama  
-Tutor for Calculus I,II,II, Linear Algebra, Differential Equations, Calculus based Physics

### HONORS AND ACTIVITIES

University of Alabama in Tuscaloosa  
Huntsville  
Assistant Disc Jockey for WVUA  
Dean's List, Fall 2000

The University of Alabama in  
Huntsville  
Honor's Scholar List  
Chi Omega Sorority

AIAA student membership

## CHRISTOPHER M. QUARLES

Current Address:  
814 11<sup>th</sup> Avenue, Apt. 20  
Tuscaloosa, Alabama 35401  
(205) 349-2804  
E-mail: [Junecq@aol.com](mailto:Junecq@aol.com)

Permanent Address:  
118 Cooper Avenue  
Trussville, Alabama 35173  
(205) 655-3201

**Professional Goal** To obtain employment with a major aerospace company, and enhance my skills as an Engineer to eventually lead a design team on a major project.

**Education** **Bachelor of Science: Aerospace Engineering**  
**Minor: Business Management and Math**  
The University of Alabama, Tuscaloosa, Alabama  
Expected Graduation: December 2004  
Cumulative GPA: 2.54/4.0 AE GPA: 2.78/4.00

**Relative Course work :** AEM 368 Dynamic Systems and Controls I and  
AEM 469 Astrodynamics

**Experience** **Associate** May 1998 -July 1999, summer 2000/'01  
K-Mart, Sporting Goods, Trussville, Alabama  
Assisted customers, stocked shelves, supervised Sporting Goods personnel, assisted with security  
**Assistant**, September 2002-May 2003,  
University Of Alabama, Tuscaloosa, Alabama  
Wind Tunnel Restoration  
Aerospace Labs, accessing repairs and replacement of instruments as needed  
**Research**, June 2003-Present  
Dr Mike Polites, University of Alabama, Tuscaloosa, AL  
Spacecraft Stabilization in a box using hard-core, low powered Magnetic torquers.  
**Paper**, Co-Author: "Test Results of Low-Power Magnetic Torquers for Spacecraft Attitude Control"

**Computer Skills** Microsoft (MS) Visual C ++, MatLab, Windows 3.1-XP, DOS 5.0-6.0, AutoCAD, MS Excel, Word, Works, PowerPoint, and MS Internet Explorer

**Honors/ Activities** Dean's List  
American Institute of Aeronautics and Astronautics (AIAA) Officer: EEC Representative 2003-2004  
James Fitts Alston Scholarship  
Hewitt Trussville PTA Scholarship  
University of Alabama "Million Dollar Band", 4 years

**References** Available upon request

# BERNARD T. SAM, EI

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1032 Chatham Pines Circle, Apt. 212 ♦ Winter Springs, FL 32708 ♦ 321.263.5439 ♦ berns871@cs.com

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**OBJECTIVE** To obtain a Coop or entry level position in the field of Mechanical or Aerospace Engineering.

**EDUCATION** **UNIVERSITY OF CENTRAL FLORIDA** Orlando, FL  
**Master of Science in Mechanical Engineering** May 2005  
Design of mechanical systems and applications  
GPA: 4.0/4.0  
**Bachelor of Science in Aerospace Engineering** May 2002  
GPA: 3.1/4.0

**EXPERIENCE** **Control Center LLC** Orlando, FL  
**ENGINEERING ASSISTANCE COOP** September 2000-August 2001; January 2002-Present

- Assist with Product Line Planning to Significantly Reduce Production Costs
- Provide Flow Calculations for Meter Tube Product Line
- Serve as Communications Link for Project Manager
- Edit AutoCAD Drawings
- Provide Project Documentation to Customers
- Assist with Quality Control Documentation to Improve Customer Satisfaction and Product Quality

**Senior Design Project, University of Central Florida**  
**ELECTRIC AIRPLANE** August 2001-May 2002

- Designed an Electric Airplane to Carry a Specified Volume of Material in the Shortest Amount of Time
- Assisted in Designing the Configuration of Electrical Components
- Worked in a Team Environment
- Learned Design Techniques, Time Management, and how to Plan and Schedule
- Contacted Vendors, Requested Quotes, Developed Parts Lists
- Raised Money to Fund Project
- Created Reports, Charts, Graphs, and Presentations in Microsoft Word, Excel, and PowerPoint

**SKILLS** *Computer:* Microsoft Office, C Programming, AutoCAD, Matlab with Simulink, Mathcad, FE-Sizer, IDEAS, ProEngineer, experience with engineering graphics packages and engineering computational packages.  
*Language:* Speak, read, and write Spanish fluently.

**ACTIVITIES** **CLUBS AND ORGANIZATIONS**

- American Institute of Aeronautics and Astronautics
  - Recording Secretary: 2001- 2002
  - Electric Airplane Competition Team Captain: 2001- 2002
  - Electric Airplane Competition Team Member: 2000- 2001
  - Experimental Aircraft Association- Air Show Volunteer
  - Mentor for incoming freshmen members
  - Engineering College Orientation Volunteer
- Society of Women Engineers
  - Historian: 2002-2003
- American Society of Mechanical Engineers
- Astronomy Society
  - Robinson Observatory Public Relations Volunteer
- Biomedical Engineering Society
- University of Central Florida Alumni Association
- College of Engineering & Computer Science Alumni Committee Member

# VISHNU K SINGH

407 Grace Street, Apt. 134  
Tuscaloosa, AL 35401

Phone: (205) 454 6100  
Email: singhvishnu@hotmail.com

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**Objective:** To acquire a position requiring innovative, challenging employment that will utilize my education and professional skills in Evolutionary Computation, Simulation and Control of aircraft and space vehicles and other aerospace engineering-related field.

## **Education:**

### **Master of Aerospace Engineering**

June 2003

The University of Alabama, Tuscaloosa, AL

**GPA: 3.44/4.0**

### **Bachelor of Instrumentation and Control Engineering**

July 2000

Pune Institute of Computer Technology, The University of Pune, Pune, India

**GPA: 3.84/4.0**

## **Bachelor's Projects:**

### **Working model of Bottling Plant using a PLC.**

Designed a working model of a Bottling Plant, using optical sensors and timers. The control logic was implemented by a programmable logical controller.

## **Computer Skills:**

**Programming Languages:** C, C++, Matlab, 8085/8086 Assembly, PLC programming

**Operating Systems:** DOS, Windows 9x/NT/2000/XP

## **Work Experience:**

### **Teaching Assistant**

January 2003-Present

Department of Aerospace Engineering, The University of Alabama, Tuscaloosa, AL

Taught Dynamics to juniors. Provided one to one assistance and evaluated their performance.

### **Graduate Assistant**

August 2002-December 2002

Department of Aerospace Engineering, The University of Alabama, Tuscaloosa, AL

Instructed Aerodynamics II to juniors and seniors. Helped them develop a proper understanding of the subject, by providing individual instruction.

### **Master's Research**

July 2001- August 2003

Department of Aerospace Engineering, The University of Alabama, Tuscaloosa, AL

1. Implemented Genetic Algorithm in optimize the position of jets on the wings of a Hypersonic aircraft for Roll control.

2. Implemented Genetic Algorithm in Sonic Boom Mitigation. The main object of the thesis was to develop a search mechanism to find an area distribution of an aircraft which showed minimum sonic boom effect.

\*Received the Outstanding Graduate Assistant 2003 Award for this research.

## **Papers/Seminars:**

IPES (2003) presented a paper on Sonic Boom Mitigation: University of Alabama

Seminar on Propulsion System: DY. College of Engineering., Pune, India.

## **Honors/Activities:**

Outstanding Graduate Research Assistant Award,

2003

President: Indian Association of Tuscaloosa,

2003-2004

Public Relations Officer: Crimson Cricket Club,

2002-2003

Most Cooperative and Supportive Passing out Senior,

2000

Class Representative,

1996-1998

Part of Hockey and Badminton team, college and Zonal level, 1996-2000



# SHANNON STATHAM

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Jacksonville, FL 32277  
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## OBJECTIVE

To pursue a summer internship in the Mechanical or Aerospace Engineering field.

## EDUCATION

- |                |   |                       |
|----------------|---|-----------------------|
| 8/02 – Current | University of Central Florida   | Orlando, Florida      |
|                | <ul style="list-style-type: none"><li>Major: Aerospace Engineering</li><li>Minor: Mathematics</li><li>Class Standing: Senior</li><li>GPA: 3.9/4.0</li></ul> |                       |
| 8/00 – 5/02    | University of North Florida   | Jacksonville, Florida |
|                | <ul style="list-style-type: none"><li>Associate of Arts Degree</li></ul>  |                       |

## HONORS & AWARDS

Dean's List (GPA : 3.9/4.0)  
Florida Merit Scholarship  
Central Florida SWE Scholarship (2003)  
Boeing Scholarship Fund (2003)

## PROJECTS

- |             |  |                  |
|-------------|--|------------------|
| 8/02 – 4/03 | Wind Tunnel Project<br>Motor/Speed Control | Orlando, Florida |
|-------------|--|------------------|

*The construction of a wind tunnel for the Aerospace Engineering department at the University of Central Florida. Involvement centered on the construction of a compatible system containing a motored fan, shroud, speed control device, and the Diffuser exit.*

## WORK EXPERIENCE

- |                |  |                  |
|----------------|--|------------------|
| 8/03 – Current | University of Central Florida  | Orlando, Florida |
|                | <i>Mentor for Engineering Introduction Course</i> <ul style="list-style-type: none"><li>Conduct Engineering related labs</li><li>Assist students with lab and course material</li><li>Mentor students</li></ul>  |                  |
| 4/03 – Current | University of Central Florida  | Orlando, Florida |
|                | <i>Research Assistant</i> <ul style="list-style-type: none"><li>Bio-Mechanical Research</li><li>Study materials under dynamic and static loading</li><li>Organize gathered data and analyze results</li><li>Assist Professor and other research assistants</li></ul> |                  |
| 11/02 – 6/03   | Mitsubishi Power Systems   | Orlando, Florida |
|                | <i>Contractor/Intern</i> <ul style="list-style-type: none"><li>Tracked Gas Turbine Engine components in shop</li><li>Updated tracking documents for components</li><li>Assisted Engineers and Operators</li></ul>  |                  |

## ACTIVITIES

- Society of Women Engineers
- Current Student Section Vice President
  - Activities and Events Committee Chairperson (2002-2003)
- Tau Beta Pi
- Engineering Honor Society
- Society of Automotive Engineers
- Community Service and Volunteer Activities (200+ hours)

## Jennifer Diane Thomas

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- Objective** To pursue a Co-op or Internship position in the Aerospace Technology field utilizing my knowledge of aviation and my engineering skills.
- Education** **Aug. 2001-Present University of Central Florida Orlando, FL**
- Major: Aerospace Engineering
  - Anticipated Graduation Date: Dec 2005
- Experience** **May 2003- Aug. 2003 Honeywell Aerospace Phoenix, AZ**  
*Control Systems Summer Intern*
- Evaluated DOORS 7.0, newer version of requirements software used throughout the company.
  - Created DOORS 7.0 training manual.
  - Researched requirements for TFE731 engine for updated requirements documents (ARINC coded tables).
  - Obtained training in Six Sigma Plus, Green Belt trained.
- Nov 2002- Present UCF Housing and Residence Life Orlando, FL**  
*Resident Assistant*
- Facilitate positive living environment for 55 undergraduates in on-campus apartments.
  - Plan and Implement educational and social programs.
  - Serve as a liaison between students and housing administration.
- Honors/Awards** UCF Deans List  
Awarded the Florida Bright Futures Scholarship (2001-Present)  
Awarded the Boeing Scholarship Fund (2003/2004)  
First Place 2002 National SWE Conference: Boeing Team Tech Competition
- Affiliations** UCF Society of Women Engineers: Current President, past treasurer, and Competitions chair.  
UCF National Society of Black Engineers, Member, past historian.  
UCF American Institute of Aeronautics and Astronautics, Member  
Volunteer UCF, Member and Active volunteer
- Skills** Proficient in Microsoft Office: Word, Excel, PowerPoint, and Access  
Skillful in DOORS, AutoCAD and Matlab  
Introductory training in ANSYS and CATIA  
Passed PAR private pilots flight exam given by the FAA

## KEVIN E. WITZBERGER

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Tuscaloosa, Alabama 35405  
(205) 886-7451  
aero5@comcast.net

- Objective** To obtain an entry-level position in the aircraft manufacturing industry with an emphasis on aircraft dynamics and controls
- Education** **Bachelor of Science: Aerospace Engineering**  
The University of Alabama, Tuscaloosa, Alabama  
Expected Graduation: May 2003  
Cumulative GPA 3.780/4.0; Major GPA 3.803/4.0  
Coursework: multivariable calculus, vectors and matrices, statics, dynamics, mechanics of materials, fluid mechanics, thermodynamics, aircraft performance, aerodynamics, aircraft structures, dynamics of flight, dynamic systems, propulsion, spacecraft dynamics and controls
- Associate in Applied Science: Aircraft Systems Maintenance Technology**  
Community College of the Air Force, Maxwell Air Force Base,  
Montgomery, Alabama  
Graduated: February 1999
- Experience** **Research Assistant**, June 2002 – August 2002, University of Alabama  
Assisted in conducting frequency and temperature response experiments for shape memory alloys (SMA). Responsible for writing various programs in MATLAB/Simulink.
- Aerospace Maintenance Craftsman**, October 1990-December 1999  
United States Air Force (Honorable Discharge)  
Inspected, maintained, operated, troubleshoot, and repaired flight control surfaces, aircraft structures, electrical systems, landing gear, cargo doors, fuel, and engine system components for C-5, C-141, C-17 and C-130 aircraft. Performed duties of flight line expeditor. Determined work and repair priorities. Scheduled and dispatched technicians. Conducted supervisory follow-up inspections on maintenance actions to ensure quality maintenance.
- Computers** C/C++, MS Office, AutoCAD, Windows, FORTRAN, MATLAB/Simulink, Maple, Mathcad
- Leadership/Awards** 2002 AIAA Junior of the Year, University of Alabama  
Tau Beta Pi (National Engineering Honor Society)  
President's List, University of Alabama, Spring 2001  
Dean's List, University of Alabama, Spring 2000, Fall 2000, Fall 2001, Spring 2002  
C-141 aircraft lead technician, October 1997-October 1999  
Dean's List, University of Maryland, Term 3, 97-98
- Volunteer Activities** Peer educator, Partners in Prevention, University of Alabama, Fall 2001; group focuses on drug and alcohol abuse prevention  
Tuscaloosa Children's Center, May 2002; performed administrative duties
- Certificates/Licenses** Airframe and Powerplant License, Federal Aviation Administration, Awarded: November 1997
- References** Available upon request